

## CLAIMS

1. A DNA coding for a protein which comprises the amino acid sequence of SEQ ID NO: 2, or a protein which comprises the amino acid sequence of SEQ ID NO: 2 where one or more amino acids are deleted, substituted, or added and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

2. A DNA coding for a protein which comprises an amino acid sequence having 60% or more homology to the amino acid sequence of SEQ ID NO: 2 and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

3. A DNA comprising the nucleotide sequence of SEQ ID NO: 1, or a DNA hybridizing with the DNA of SEQ ID NO: 1 under stringent conditions and coding for a protein which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

4. A DNA which is contained in a plasmid carried by FERM BP-6479 and codes for a protein which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

5. The DNA according to any one of claim 1, wherein the protein which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum* is a protein having an activity of giving an insensitivity to 100 µg/ml lysozyme to a mutant belonging to *Corynebacterium glutamicum* and having a sensitivity to not more than 50 µg/ml lysozyme.

6. The DNA according to any one of claim 1, wherein the DNA is a DNA derived from a microorganism belonging to the genus *Corynebacterium*.

7. The DNA according to any one of claim 1, wherein the DNA is a DNA derived from a microorganism belonging to *Corynebacterium glutamicum*.

8. A recombinant vector comprising the DNA according to claim 1.

9. A transformant prepared by introducing the recombinant vector of claim 8 into a host cell.

00786474-030501

10. A protein which comprises the amino acid sequence of SEQ ID NO: 2, or a protein which comprises the amino acid sequence of SEQ ID NO: 2 where one or more amino acids are deleted, substituted, or added and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

11. A protein which comprises an amino acid sequence having 60% or more homology to the amino acid sequence of SEQ ID NO: 2 and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

12. The protein according to claim 10, wherein the protein which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum* is a protein having an activity of giving an insensitivity to 100 µg/ml lysozyme to a mutant belonging to *Corynebacterium glutamicum* and having a sensitivity to not more than 50 µg/ml lysozyme.

13. A method for producing the protein of claim 10, which comprises (A) culturing a transformant prepared by introducing a recombinant vector which comprises a DNA that codes for a protein having an amino acid sequence of SEQ. ID. NO:2 or a protein having an amino acid sequence of SEQ. ID. NO:2 wherein one or more amino acids are deleted, substituted, or added and has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*; (B) producing and accumulating the protein in the culture; and (C) collecting the protein from the culture.

14. A method for the preparation of a bacterium having a lysozyme sensitivity, which comprises inactivating the activity of a protein which comprises the amino acid sequence of SEQ ID NO: 2, or a protein which comprises the amino acid sequence of SEQ ID NO: 2 where one or more amino acids are deleted, substituted, or added and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

15. The method according to claim 14, wherein a mutation is introduced into a chromosomal gene coding for the protein which comprises the amino acid sequence of

09786474-030501

SEQ ID NO: 2, or a protein which comprises the amino acid sequence of SEQ ID NO: 2 where one or more amino acids are deleted, substituted, or added and which has an activity of giving a lysozyme insensitivity to a lysozyme-sensitive microorganism belonging to *Corynebacterium glutamicum*.

16. The method according to claim 14, wherein the bacterium is a microorganism belonging to the genus *Corynebacterium*.

17. A bacterium obtainable by the method of claim 14.

18. A method for producing an amino acid, which comprises culturing the bacterium of claim 17 in a medium, producing and accumulating an amino acid in the culture, and collecting the amino acid from the culture.

19. The method according to claim 18, wherein the amino acid is glutamic acid or glutamine.

09786474.030501

add as  
add B7